REMARKS

Courtesies extended to Applicant Desai, and Applicants' representative in the telephone interview held July 8, 2004, are acknowledged with appreciation.

As discussed during the telephone interview, the present invention relates to articles of manufacture and formulations for the in vivo delivery of substantially water insoluble pharmacologically active agents (e.g., the anticancer drug paclitaxel) in nanoparticle form. Invention articles comprise a dry powder or liquid formulation of amorphous drug nanoparticles coated with at least one protein.

By the present communication, the specification has been amended to clarify the claim of priority. The present application is a 371 of PCT/US98/13272, which in turn, is a continuation-in-part of 2 prior applications—Provisional Application No. 60/051,021, and Utility Application No. 08/926,155. In addition, the objected to incorporation by reference with respect to prior applications has been deleted by the amendments submitted herewith.

In addition, by the present communication, claims 73, 103, 107 and 108 have been amended, and new claims 122-133 have been added to define Applicants' invention with greater particularity. No new matter is introduced by the subject amendments as the amended claim language is fully supported by the specification and original claims (see, for example, page 27, lines 13-15 (with respect to the term "amorphous"); page 45, lines 5-7 (with respect to average diameter of nanoparticles), and page 50, line 3 (with respect to immunosuppressive agents) of Applicants' specification).

Furthermore, non-elected claims 29-35, 46-67, 70-72, 76-100 and 109-121 have been cancelled without prejudice, subject to Applicants' right to file one or more divisional application(s) based thereon.

Accordingly, claims 73-75, 101-105, 107, 108 and 122-133 are currently pending. The present status of all claims in the application is provided in the Listing of Claims presented herein beginning on page 3.

Priority

The Examiner's assertion that Applicants are not entitled to a claim of priority back to 2/22/93 is respectfully traversed. However, to reduce the issues and expedite prosecution, the claim of priority has been streamlined by the present communication.

As acknowledged by the Examiner, international application PCT/US98/13272 properly claims priority to both Provisional Application No. 60/051,021 (filed 6/27/97), and Utility Application No. 08/926,155 (filed 9/9/97). Accordingly, it is respectfully submitted that Applicants are entitled to the claim of priority back to 6/27/97 (the priority date of '021), and not 9/9/97 as incorrectly asserted in the Office Action at page 2, line 21.

Objection under 35 U.S.C. §132

The objection to the amendment submitted 11/3/03 under 35 U.S.C. §132 as allegedly introducing new matter into the disclosure is respectfully traversed, and has been rendered moot by the amendment submitted herewith, wherein the objected to language has been deleted.

Rejection of claims 73-75, 101-104, 107 and 108 under 35 U.S.C. §102(b)

The rejection of claims 73-75, 101-104, 107 and 108 under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,439,686 (Desai *et al.*), is respectfully traversed.

Applicants' invention, as defined by amended claim 73, distinguishes over Desai at least by requiring an article of manufacture comprising a dry powder or liquid formulation comprising

amorphous drug nanoparticles coated with protein. Desai does not disclose or suggest such formulations.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejection of claims 73-75, 101-104, 107 and 108 under 35 U.S.C. § 102(e)

The rejection of claims 73-75, 101-104, 107 and 108 under 35 U.S.C. §102(e), as allegedly being anticipated by U.S. Patent No. 5,945,033 (Yen *et al.*), is respectfully traversed.

Applicants' invention, as defined for example by amended claim 73, distinguishes over Yen at least by requiring an article of manufacture comprising a dry powder or liquid formulation comprising amorphous, nanoparticle size drug coated with protein. Yen does not disclose the formulation of claim 73. Instead, Yen discloses mixtures of nanometer and micrometer size particles of albumin and hemoglobin. Indeed, none of the formulations disclosed in Yen contain an amorphous drug in nanoparticle size coated with a protein.

In contrast to the present claims, the '620 patent discloses nanomatrixes (prepared from hemoglogin, albumin and an alcohol solvent), which nanomatrixes vary widely, i.e., from less than 0.05 microns to larger than 1 micron in diameter, and are useful for entrapping biologically active substances for in vivo administration (see, Abstract and col. 5 lines 11-20). Moreover, none of the formulations disclosed in the '620 patent contain an amorphous drug in nanoparticle size coated with a protein.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejection of claims 73, 102, 103, 107 and 108 under 35 U.S.C. §102(e)

The rejection of claims 73, 102, 103, 107 and 108 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 5,897,879 (Friedman *et al.*), is respectfully traversed.

Applicants' invention, as defined by amended claim 73, distinguishes over Friedman at least by requiring an article of manufacture comprising a dry powder or liquid formulation comprising amorphous drug nanoparticles coated with protein. Friedman does not disclose or suggest such formulations.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejection of claims 73-75, 101-104, 105, 107 and 108 under 35 U.S.C. § 103(a)

The rejections of claims 73-75, 101-104, 107 and 108 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 6,143,276 (Unger *et al.*) and claim 105 under 35 U.S.C. § 103(a) as allegedly being obvious over Unger further in view of U.S. Patent No. 5,731,355 (Jones *et al.*), are respectfully traversed. Applicants' invention, as defined by amended claim 73, distinguishes over Unger at least by requiring an article of manufacture comprising a dry powder or liquid formulation comprising amorphous drug nanoparticles coated with protein. Unger does not disclose or suggest such formulations. Instead, Unger describes use of compositions comprising a bioactive agent and a gaseous precursor. The resulting Unger compositions are clearly different than the amorphous drug nanoparticles coated with protein required by the present claims.

Further reliance on Jones is unable to cure the deficiencies of Unger. No motivation has been provided, absent Applicant's specification, to combine the asserted references. Such use of Applicant's disclosure is clearly improper.

Even if combination of Unger and Jones were proper, the combination would not lead one of skill in the art to arrive at the present invention. Whereas Unger relates to methods for delivery of bioactive agents using compositions comprising the bioactive agent and a gaseous precursor, Jones relates to methods of producing anaesthesia employing oil-in-water emulsions of a defined agent. As a result, one attempting to combine the teachings of the asserted references would perhaps achieve an alternate method to deliver the anaesthetic of Jones, but would not obtain a nanoparticle coated with protein as required by the present claims.

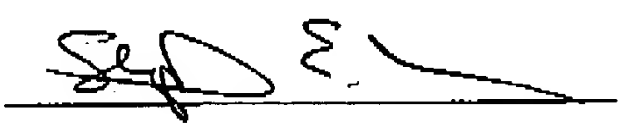
Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

Conclusion

In view of the above amendments and remarks, prompt and favorable action on all claims is respectfully requested. In the event any matters remain to be resolved in view of this communication, the Examiner is encouraged to call the undersigned so that a prompt disposition of this application can be achieved.

Respectfully submitted,

Date: August 6, 2004

By: 

FOLEY & LARDNER LLP
Customer Number: 30542
Telephone: (858) 847-6719
Facsimile: (858) 792-6773

Stephen E. Reiter
Attorney for Applicant
Registration No. 31,192

Enclosure:

Updated Application Data Sheet